

REMARKS/ARGUMENTS

Claims 1 - 15 were cancelled in a previous amendment.

Please cancel claims 23-26 without prejudice.

Claims 16-22 remain pending in the application.

Claims 23-26, the broadest claims in the application have been cancelled.

The rejection of claims 16-22 under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0191795 A1 to Bernardin et al (hereinafter Bernardin) in view of U.S. Pub. No. 2003/0120709 A1 to Pulsipher et al (hereinafter Pulsipher) is respectfully traversed.

Initially, we observe that in the first Office Action of December 29, 2006, original claims 3, 6, 9, 11, 13 and 15 were indicated as being allowable if written in independent form, including all of the limitations of the respective intervening claims and any intervening claims. Claim 16 is essentially claims 1, 2 and 3 combined; claim 17 is essentially claims 4, 5 and 6 combined; claim 18 is essentially claims 7, 8 and 9 combined; and claim 19 is essentially claims 10 and 11 combined. Claim 20 includes the subject matter of claim 11, and claim 21 essentially is the subject matter of claim 13, with its parent claim 12 merged into it. Claim 22 is essentially claim 15 with its parent claim 14 added thereto. Hence, these claims have been indicated as containing allowable subject matter; and the Examiner has now withdrawn the indication of allowability with these claims without saying so.

The Examiner contends that Bernardin is silent with reference to:

...attempting to locate a selected task from within the job queue which is capable of being executed simultaneously with the first task, while considering only the task in said job queue with the priority equal to that of the first task and if such a selected task is located, replacing said selected task with a combined task that comprises the first task and the selected task for simultaneous execution.

The Examiner then contends that Pulsipher teaches attempting to locate a selected task from within the job queue which is capable of being executed simultaneously with the first task, while considering only tasks in the job queue with the priority equal to that of the first task. The Examiner refers to page 2 paragraph 0024, Block 404 page 8 paragraph 0113 and paragraph 0114. Fig. 4 paragraph 0024, paragraph 0113 and paragraph 0114 of Pulsipher are reproduced as follows:

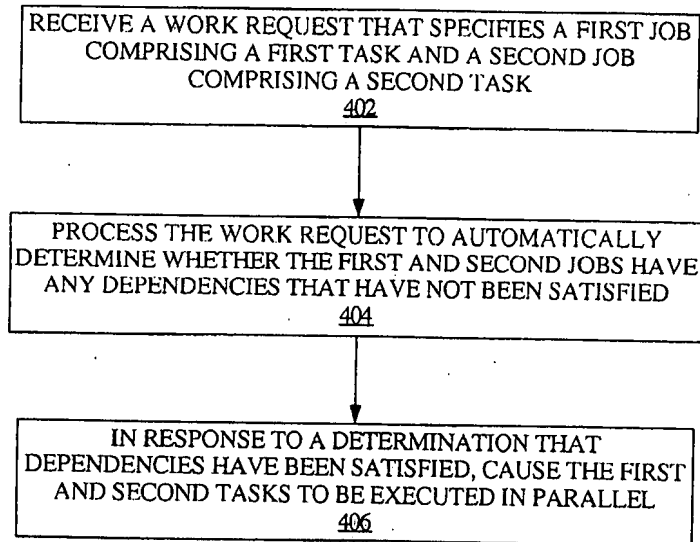


FIG. 4

[0024] According to embodiments, a dependency can be specified between a job at any level of an aggregation hierarchy and another job at the same or any other level of the hierarchy. Thus, a job at one level can be dependent on another job at another level.

[0113] At block 404, the work request is processed to automatically determine whether the first and second jobs have any dependencies that have not been satisfied. In response to a determination that the first and second jobs have no dependencies that have not been satisfied, at block 406 the first and second tasks are caused to be executed in parallel. For example, the tasks are sent to a networked multi-processor computing environment, e.g., a server farm 108 (FIG. 1), for execution on one or more processors of the computing environment.

[0114] Significantly, the work request does not explicitly specify that the first and second tasks are to be executed in parallel. Hence the default work execution order is to run jobs in parallel, that is, to run the tasks constituent to jobs, in parallel. Since each job is run in parallel unless otherwise specified in the work request, the respective set of task commands included in each respective job are collectively executed in parallel with each other. For example, tasks 1-4 of a first job are submitted to a distributed resource management application 106 (FIG. 1) to be executed on a server farm 108 (FIG. 1) in parallel with tasks 110 of a second job. Parallel processing of as much of the work as possible, or feasible, provides for efficient use of computational resources and for faster job processing.

As said in block 404 of Pulsipher:

"Process the work request to automatically determine whether the first and second jobs have any dependencies that have not been satisfied."

Applicants' claim 16 avoids this by requiring:

...while considering only the tasks in said job queue with a priority equal to that of the first task....

Applicants' claim 17 avoids this by requiring:

...considering only the tasks in said job queue with a priority equal to that of the first task....

Applicants' claim 18 avoids this by reciting:

...wherein the processor further comprises instructions for selecting as the first task a waiting task for which no other waiting task has a higher priority....

Applicants' claim 19, clause (e) recites as follows:

...while considering only the tasks in the job queue that have a priority equal to that of the first task....

Likewise, claim 20 which depends from claim 19 avoids the art by specifying:

...if the computing device does not have sufficient resources to execute the first task, the steps of:

- a) determining whether the first task is time sensitive;
- b) if the first task is time sensitive, rejecting the first task; and
- c) if the first task is not time sensitive, attempting to schedule a next task of the same priority as said first task before re-attempting to schedule the first task.

Finally, claim 21 includes the language from claim 15 reading:

- c) instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, in the event that the computing device has sufficient resources to execute the first task and for rejecting the first task, in the event that the computing

device does not have sufficient resources to execute the first task and that the first task is time sensitive;

d) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located; and

e) instructions for attempting to schedule a second task before attempting to schedule the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is not time sensitive.

The Examiner originally indicated this subject matter as avoiding the art and it still does for the reasons given above.

In view of the above, further and favorable reconsideration is respectfully requested.

Respectfully submitted,



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In the event this paper is deemed not timely filed, the applicant hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 26-0090 along with any other additional fees which may be required with respect to this paper.